

## FAX TRANSMISSION

DATE: December 11, 2003  
CLIENT NO.: 8733.392  
MESSAGE TO: Examiner Ismael Negron  
COMPANY: PTO  
FAX NUMBER: (703) 746-4764  
PHONE: (703) 308-6086  
FROM: Song K. Jung  
PHONE: (202) 496-7413

**URGENT**

PAGES (Including Cover Sheet): 29 HARD COPY TO FOLLOW: ☐ YES ☒ NO

MESSAGE: Dear Examiner Negron:  
Please find attached Appeal Brief for U.S. Appl. No. 09/893,622 which was filed on July 21, 2003. Thank you for your attention to this matter.

If your receipt of this transmission is in error, please notify this firm immediately by collect call to sender at (202) 496-7643 and send the original transmission to us by return mail at the address below.

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MCKENNA LONG & ALDRIDGE LLP  
1900 K Street, N.W., Washington, DC 20006  
Telephone: (202) 496-7500 Facsimile: (202) 496-7756

## PATENT/WASHINGTON

File No. 8733.392.00Atty: RGR/KME/debLAN NO: 392Application No.: 09/893,622In the Matter of the Application of: Joung Jae LEEFor: **BACKLIGHT ASSEMBLY FOR LIQUID CRYSTAL  
DISPLAY**Filed: June 29, 2001Date: July 21, 2003The following has been received in the U.S. Patent Office on  
the date stamped hereon:

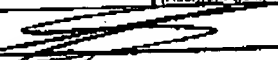
1. Appeal Brief
2. Appeal Brief Transmittal
3. Fee Transmittal
4. Petition for Extension of Time Under 37 CFR 1.136(a)
5. Checks in the amount of [\$320.00 = Appeal Brief Filing Fee]  
and [\$110.00 = EOT Filing Fee]


DUE DATE: July 21, 2003

PTO/SB/17 (05-03)

Approved for use through 04/30/2003. OMB 0651-0032  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>FEE TRANSMITTAL</b>		<b>Complete if Known</b>																																																																																																																																																																																			
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ADDITIONAL FEES</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">Large Entity</th> <th colspan="2">Small Entity</th> <th rowspan="2">Fee Description</th> <th rowspan="2">Fee Paid</th> </tr> <tr> <th>Fee Code</th> <th>Fee (\$)</th> <th>Fee Code</th> <th>Fee (\$)</th> </tr> </thead> <tbody> <tr> <td>1051</td> <td>130</td> <td>2051</td> <td>65</td> <td>Surcharge - late filing fee or oath</td> <td></td> </tr> <tr> <td>1052</td> <td>50</td> <td>2052</td> <td>25</td> <td>Surcharge - late provisional filing fee or cover sheet</td> <td></td> </tr> <tr> <td>1053</td> <td>130</td> <td>1053</td> <td>130</td> <td>Non-English specification</td> <td></td> </tr> <tr> <td>1812</td> <td>2,520</td> <td>1812</td> <td>2,520</td> <td>For filing a request for ex parte reexamination</td> <td></td> </tr> <tr> <td>1804</td> <td>920*</td> <td>1804</td> <td>920*</td> <td>Requesting publication of SIR prior to Examiner action</td> <td></td> </tr> <tr> <td>1805</td> <td>1,840*</td> <td>1805</td> <td>1,840*</td> <td>Requesting publication of SIR after Examiner action</td> <td></td> </tr> <tr> <td>1251</td> <td>110</td> <td>2251</td> <td>55</td> <td>Extension for reply within first month</td> <td>110.00</td> </tr> <tr> <td>1252</td> <td>410</td> <td>2252</td> <td>205</td> <td>Extension for reply within second month</td> <td></td> </tr> <tr> <td>1253</td> <td>930</td> <td>2253</td> <td>465</td> <td>Extension for reply within third month</td> <td></td> </tr> <tr> <td>1254</td> <td>1,450</td> <td>2254</td> <td>725</td> <td>Extension for reply within fourth month</td> <td></td> </tr> <tr> <td>1255</td> <td>1,970</td> <td>2255</td> <td>985</td> <td>Extension for reply within fifth month</td> <td></td> </tr> <tr> <td>1401</td> <td>320</td> <td>2401</td> <td>160</td> <td>Notice of Appeal</td> <td></td> </tr> <tr> <td>1402</td> <td>320</td> <td>2402</td> <td>160</td> <td>Filing a brief in support of an appeal</td> <td>320.00</td> </tr> <tr> <td>1403</td> <td>280</td> <td>2403</td> <td>140</td> <td>Request for oral hearing</td> <td></td> </tr> <tr> <td>1451</td> <td>1,510</td> <td>1451</td> <td>1,510</td> <td>Petition to institute a public use proceeding</td> <td></td> </tr> <tr> <td>1462</td> <td>110</td> <td>2462</td> <td>55</td> <td>Petition to revive - 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<b>SUBMITTED BY</b> Name (Print/Type): Song K. Jung Signature: 		<b>Complete (if applicable)</b> Registration No. (Attorney/Agent): 35,210 Telephone: (202) 496-7413 Date: July 21, 2003																																																																																																																																																																																			

TRANSMITTAL OF APPEAL BRIEF			Docket No. 8733.392.00-US	
In re Application of: Joung-Jae Lee				
Application No. 09/893,622	Filing Date June 29, 2001	Examiner Not Yet Assigned	Group Art Unit N/A	
Invention: BACK LIGHT ASSEMBLY OF LIQUID CRYSTAL DISPLAY DEVICE				
<b><u>TO THE COMMISSIONER OF PATENTS:</u></b>				
Transmitted herewith in triplicate is the Appeal Brief in this application, with respect to the Notice of Appeal filed: <u>April 21, 2003</u>				
The fee for filing this Appeal Brief is <u>320.00</u>				
<input checked="" type="checkbox"/> Large Entity <input type="checkbox"/> Small Entity				
<input checked="" type="checkbox"/> A check in the amount of <u>320.00</u> is enclosed.				
<input type="checkbox"/> Charge the amount of the fee to Deposit Account No. _____ This sheet is submitted in duplicate.				
<input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.				
<input checked="" type="checkbox"/> The Director is hereby authorized to charge any additional fees that may be required or credit any overpayment to Deposit Account No. <u>50-0911</u> This sheet is submitted in duplicate.				
 Song K. Jung Attorney Reg. No. : 35,210 MCKENNA LONG & ALDRIDGE LLP 1900 K Street, N.W. Washington, DC 20006 (202) 496-7413			Dated: <u>July 21, 2003</u>	

DC:129845.1

**PATENT**  
**8733.392.00**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In Re application of

**Joung Jae LEE**

Group Art Unit: 2875

Application No.: 09/893,622

Examiner: Ismael NEGRON

Filed: June 29, 2001

For: **BACK LIGHT ASSEMBLY FOR LIQUID CRYSTAL DISPLAY  
DEVICE**

**APPELLANT'S BRIEF**

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

In response to a Final Rejection of all pending claims that was mailed on December 19, 2002, and an Advisory Action that was mailed on March 24, 2003, and in support of a "Notice of Appeal" filed on April 21, 2003, Appellant hereby submits this Appeal Brief.

The fees required under § 1.17(f) and any required petition for extension of time for filing this brief and fees therefore are dealt with in the accompanying TRANSMITTAL OF APPEAL BRIEF.

This brief is transmitted in triplicate.

This brief contains items under the following headings as required by 37 C.F.R. §

1.192 and M.P.E.P. § 1206:

- I. Real Party In Interest
- II. Related Appeals and Interferences
- III. Status of Claims

Application No.: 09/893,622  
Group Art Unit: 2875

Docket No.: 8733.392.00  
Appellant's Brief filed July 21, 2003

Page 2 of 24

IV. Status of Amendments

V. Summary of Invention

VI. Issues

VII. Grouping of Claims

VIII. Arguments

IX. Claims Involved in the Appeal

Appendix A Claims

**I. REAL PARTY IN INTEREST**

The real party in interest for this appeal is:

Joung-Jae LEE and LG.Philips LCD Co., Ltd.

**II. RELATED APPEALS AND INTERFERENCES**

There are no other appeals or interferences that will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

**III. STATUS OF CLAIMS**

Total Number of Claims in the Application

There are 28 claims pending in the application.

Current Status of Claims

Claims canceled: N/A

Claims withdrawn from consideration but not canceled: N/A

Claims pending: 1-28

Claims allowed: N/A

Claims rejected: 1-28

Claims On Appeal: The claims on appeal are claims 1-28.

Application No.: 09/893,622  
Group Art Unit: 2875

Docket No.: 8733.392.00  
Appellant's Brief filed July 21, 2003

Page 3 of 24

#### **IV. STATUS OF AMENDMENTS**

The Examiner issued a Non-Final Rejection on July 3, 2002. Appellant amended claims 1, 17, 19, and 20 in a Reply under 37 CFR § 1.111 on October 3, 2002. The Examiner issued a Final Rejection on December 19, 2002. Appellant filed a Request for Reconsideration on March 5, 2003. The claims were not amended after the final rejection. The Examiner responded to the Request for Reconsideration in an Advisory Action mailed March 24, 2003. In the Advisory Action, the Examiner indicated that Appellant's remarks in the Request for Reconsideration were considered, but did not place the application in condition for allowance. Appellant filed a Notice of Appeal on April 21, 2003.

Accordingly, the claims enclosed herein as Appendix A reflect the originally filed claims 2-16, 18, and 21-28 and amended claims 1, 17, 19, and 20.

#### **V. SUMMARY OF INVENTION**

The present invention relates to a liquid crystal display device, and more particularly to a back light assembly for a liquid crystal display device.

An advantage of the present invention is a back light assembly for a liquid crystal display device that prevents foreign materials or scratches from occurring on a diffusion plate, thereby improving an image.

Another advantage of the present invention is a back light assembly of a liquid crystal display device having a member supporting a diffusion plate with sufficient rigidity to prevent the diffusion plate from dropping down.

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## VI. ISSUES

The first issue is whether the Examiner properly rejected claims 1-11 and 15-28 under 35 U.S.C. § 103(a) as being unpatentable over the related art shown in Figure 1 in view of Hoven et al. (U.S. Pat. No. 2,865,133).

The second issue is whether the Examiner properly rejected claims 12-14 under 35 U.S.C. § 103(a) as being unpatentable over the related art shown in Figure 1 in view of Hoven et al. and further in view of Bidwell et al. (U.S. Pat. No. 134,783), Hayes (U.S. Pat. No. 316,619), Lambert (U.S. Pat. No. 664,652), McGahan (U.S. Pat. No. 667,555), Craig (U.S. Pat. No. 977,710), and/or Crain (U.S. Pat. No. 1,603,195).

## VII. GROUPING OF CLAIMS

For purposes of this appeal brief only, and without conceding the teachings of any prior art reference, the claims have been grouped as indicated below:

### Group/Claim(s)

- A. Independent claim 1 and its dependent claims 2-26; and
- B. Independent claim 27.
- C. Independent claim 28.

In Section VIII below, Appellant has included arguments supporting the separate patentability of each claim group as required by M.P.E.P. § 1206.

## VIII. ARGUMENTS

- A. The Examiner improperly rejected claims 1-11 and 15-28 under 35 U.S.C. § 103(a) as being unpatentable over the related art illustrated in Figure 1 in view of Hoven et al.



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Independent claim 1 is allowable over the cited art in that claim 1 recites a combination of elements including, for example, "a mold frame having first and second end portions; lamp supporters at the first and second end portions of the mold frame; a lamp having first and second end portions, the lamp supporters receiving the lamp...; and a diffusion plate supporting member between the reflection sheet and the diffusion plate, wherein only a portion of the diffusion plate supporting member contacting the diffusion plate comprises an elastic material."

Independent claim 27 is allowable over the cited art in that claim 27 recites a combination of elements including, for example, "[a] method of forming a back light assembly having a mold frame, lamp supporters, a lamp, ...a diffusion plate and a supporting member, the method comprising: coupling lamp supporters to the mold frame... receiving the lamp at the lamp supporters."

Independent claim 28 is allowable over the cited art in that claim 28 recites a combination of elements including, for example, "a mold frame; lamp supporters coupled to the mold frame; a lamp coupled to the lamp supporters; a reflection sheet...; a diffusion plate...; and a diffusion plate supporting member between the reflection sheet and the diffusion plate, the diffusion plate supporting member having an elastic material contacting the diffusion plate, the diffusion plate supporting member including: a first portion coupled to the mold frame at one side, the diffusion plate support member having sufficient rigidity to prevent the diffusion plate from dropping down; and a second portion coupled to one end of the first portion contacting the diffusion plate, the second portion having more elasticity than the first portion."

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According to M.P.E.P. § 2143, establishment of a *prima facie* case of obviousness requires at least that the references relied upon teach or suggest all the claim limitations. See also *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). The express, implicit, and inherent disclosures of a reference may be relied upon in the rejection of claims under 35 U.S.C. 102 or 103. M.P.E.P. § 2112. However, "[t]he fact that a certain characteristic may be present in a [reference] is not sufficient to establish the inherency of that characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993). "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill...'" *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999). "In relying upon the theory of inherency, the Examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied [reference]." *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990). (emphasis in original)

In rejecting claims 1-11 and 15-28 under 35 U.S.C. § 103(a) as being unpatentable over the related art shown in Figure 1 in view of Hoven et al., the Examiner preliminarily cites the related art shown in Figure 1 as disclosing at least six elements including

"a lamp having first and second end portions, page 3, lines 21 and 22 of the specification as filed; lamp supporters located at the first and second end portions of the mold frame, inherent; the lamp supporters receiving the lamps, inherent; ...means for immovably coupling the diffusion plate supporting member and the mold frame, inherent; ...a plurality of diffusion plate supporting members supporting the diffusion plate; and a panel guide located opposite the mold frame with respect to the diffusion plate, Figure 1, reference number 6." See pages 2 through 4 of the Final Office Action.

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With respect to the alleged teaching of the first above-cited element by the related art illustrated in Figure 1, Appellant respectfully submits that page 3, lines 21 and 22 of the specification as filed states only that "[a] plurality of lamps (not shown) are provided in a space between the reflection sheet 4 and the diffusion plate 5." Accordingly, Appellant respectfully submits the specification fails to describe, either inherently or explicitly "a lamp having first and second end portions," as asserted by the Examiner. Absent some basis in fact and/or technical reasoning making it clear that the lamp disclosed in the text supporting the related art illustrated in Figure 1, but not shown, necessarily includes the claimed first and second end portions, and that it would be so recognized by persons of ordinary skill, Appellant respectfully submits that limitations have been improperly been read into the disclosure of the related art illustrated in Figure 1 using the claimed invention as a template.

With respect to the alleged teachings of the second and third above-cited elements by the related art illustrated in Figure 1, Appellant respectfully submits it appears that the Examiner admits deficiencies of the related art shown in Figure 1 and attempts to cure the deficiencies by relying on inherency.

Appellant respectfully submits, however, the Examiner has provided no basis in fact and/or technical reasoning making it clear that the related art illustrated in Figure 1 necessarily includes lamp supporters that receive the lamps, much less that lamp supporters are located at first and second end portions of the mold frame, and that it would be so recognized by persons of ordinary skill. Accordingly, Appellant respectfully submits that limitations have been improperly been read into the disclosure of the related art illustrated in Figure 1 using the claimed invention as a template.

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At paragraph 6 within the "Response to Arguments" section of the Final Office Action, the Examiner stated "[i]n response to the Appellant's arguments regarding the lamp supporters the Appellant is directed to page 3, lines 21 and 22, where the [Appellant] admits that the [related art shown in Figure 1] includes a plurality of lamps. Such disclosed plurality of lamps would inherently require a support, as such plurality of lamps could not be [placed] in space without it."

Appellant respectfully submits, however, the fact that a plurality of lamps are included within a liquid crystal display device does not necessarily support a conclusion that the plurality of lamps are received by lamp supporters, much less that lamp supporters are arranged at first and second end portions of a mold frame, as asserted by the Examiner. Rather, such a conclusion is only arrived at in light of the presently claimed invention. Concluding that the plurality of lamps within the related art illustrated in Figure 1 even inherently requires lamp supporters, merely because a plurality of lamps are disclosed and without any other evidence and/or technical reasoning, improperly modifies the related art illustrated in Figure 1 using impermissible hindsight reconstruction. "A retrospective view of inherency is not a substitute for some teaching or suggestion which supports the selection and use of the various elements in the particular claimed invention." *In re Newell*, 891 F.2d 899, 13 USPQ2d 1248 (Fed. Cir. 1989).

With respect to the alleged teaching of the fourth above-cited element by the related art illustrated in Figure 1, Appellant respectfully submits it appears that the Examiner admits deficiencies of the related art shown in Figure 1 and attempts to cure the deficiencies by relying on inherency.

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As similarly discussed above with respect to the alleged teachings of the second and third cited elements by the related art illustrated in Figure 1, Appellant respectfully submits the fact that a diffusion plate supporting member and mold frame are present does not necessarily support a conclusion that a means for immovably coupling the diffusion plate supporting member and the mold frame exist, as asserted by the Examiner. Rather, such a conclusion is only arrived at in light of the presently claimed invention. Absent some basis in fact and/or technical reasoning to support the determination of the existence of means for immovably coupling the diffusion plate supporting member and the mold frame, Appellant respectfully submits limitations have merely been read into the disclosure of the related art illustrated in Figure 1 using the claimed invention as a template.

With respect to the alleged teaching of the fifth above-cited element by the related art illustrated in Figure 1, Appellant respectfully submits page 3, line 17-18 of the specification as filed states only that "...a support 6 is provided between a reflection sheet 4 and a diffusion plate 5." Moreover, page 4, line 1-2 of the specification as filed states only that "[t]he support 6 is made of a rigid material... to sufficiently prevent the diffusion plate 5 from dropping down."

Accordingly, Appellant respectfully submits the specification fails to describe, either inherently or explicitly "a plurality of diffusion plate supporting members supporting the diffusion plate," as asserted by the Examiner.

Lastly, and with respect to the alleged teaching of the sixth above-cited element by the related art illustrated in Figure 1, Appellant respectfully submits the related art illustrated in Figure 1, and the related text, is completely silent as to any inherent or explicit teaching of a "panel guide located opposite the mold frame with respect to the diffusion plate," as

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asserted by the Examiner. It appears as though the Examiner cites reference numeral 6 of the related art illustrated in Figure 1 as corresponding to the alleged panel guide. As mentioned in the paragraph above, however, the structure identified by reference numeral 6 is a support provided to prevent the diffusion plate 5 from dropping down. Moreover, assuming *arguendo* that the support 6 could be read as being the "panel guide," as asserted by the Examiner, Appellant respectfully submits the support 6 is not "located opposite the mold frame with respect to the diffusion plate," also as asserted by the Examiner. Rather, such a conclusion is only arrived at in light of the presently claimed invention. Absent some basis in fact and/or technical reasoning to support the determination of the existence of the claimed panel guide, Appellant respectfully submits limitations have merely been read into the disclosure of the related art illustrated in Figure 1 using the claimed invention as a template.

Continuing with the rejection of 1-11 and 15-28 under 35 U.S.C. § 103(a) as being unpatentable over the related art shown in Figure 1 in view of Hoven et al., the Examiner states the related art shown in Figure 1 fails to show

"...the support member being made out of metal; the contact portion including a cap having an insertion hole for receiving one end of the support portion; contact portion having a projection for preventing the contract portion from being detached from the support portion; the top portion of the support portion having a first conical shape and the bottom portion having a second conical shape; the second conical shape being smaller than the first conical shape; a cylindrical middle portion between the first and second portions; the support portion including a first hole; the mold frame including a second hole; a fastening element passing through the first and second hole for coupling the mold frame and the supporting member; and the fastening member being a screw,"

and cites Hoven et al. as disclosing "... a supporting member, Figure 1, reference number 12; the supporting member being made out of metal, column 1, lines 50-52; the

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supporting member having an elastic material contact portion, Figure 1, reference number 13; the contact portion being made of rubber, column 1, lines 57 and 58..."

According to M.P.E.P. § 2141.01(a), a reference relied upon under 35 U.S.C. § 103 must be an analogous reference. "In order to rely on a reference as a basis for rejection of an Appellant's invention, the reference must either be in the field of Appellant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992). For the reasons set forth below, Appellant respectfully submits Hoven et al. is not available as a reference under 35 U.S.C. § 103 as Hoven et al. is nonanalogous prior art and is therefore unavailable as a reference under 35 U.S.C. § 103.

First, Appellant respectfully submits the fields of endeavor between Hoven et al. and the related art shown in Figure 1 are not the same.

For example, Appellant respectfully submits the field of endeavor in Hoven et al. "relates to furniture construction and more particularly to footed supporting legs for articles of furniture." (see column 1, lines 15-17 of Hoven et al.) The Appellant's field of endeavor, however, "relates to a liquid crystal display device, and more particularly, to a back light assembly for a liquid crystal display device." (see page 2, lines 6-7 of the specification as filed)

Accordingly, Appellant respectfully submits the fields of endeavor between Hoven et al. and the related art shown in Figure 1 are not the same.

Second, Appellant respectfully submits Hoven et al. is not reasonably pertinent to the particular problem with which Appellant is concerned.

For example, Hoven et al. states at column 1, lines 18-29,

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"The primary objects of the invention are to provide... a means and a method for easily and economically assembling the foot to the leg and in such a manner that after then are assembled, removal of the foot from the leg is extremely difficult thus to prevent accidental removal or deliberate and surreptitious removal as sometimes occurs in schools; and to provide such a footed furniture leg which is economical in manufacture, durable in use, and attractive in appearance."

In contrast, page 4, lines 4-13 of the specification as filed states

"If an external impact or oscillation is applied to the liquid crystal display device, foreign materials or scratches occur on a contact area between the diffusion plate and the support due to friction between them. The foreign materials or scratches act on the display area leading to poor image quality. In addition, since the support has a pointed end portion, the end portion may be broken or deformed due to such external impact. In this case, the support cannot prevent the diffusion plate from dropping down. To solve such a problem, the support may be of a soft material such as a rubber. In this case, however, the support cannot sufficiently support the diffusion plate due to reduced rigidity."

Accordingly, Appellant respectfully submits the particular problems with which

Hoven et al. and the related art shown in Figure 1 are concerned are not the same or even remotely similar.

Accordingly, and because of the subject matter with which Hoven et al. deals, Appellant respectfully submits the subject matter of Hoven et al. would not have logically commended itself to one of ordinary skill in the art considering the problem with which the present invention is concerned. Therefore, Appellant respectfully submits it has not been shown that a person of ordinary skill, seeking to solve the problems set forth in specification as filed, would reasonably be expected or motivated to look to footed supporting legs for articles of furniture.

At paragraph 7 of the "Response to Arguments" section in the Final Office Action, the Examiner admits that the general disclosure of Hoven et al. refers to providing furniture



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legs but states "...it is also a fact that the cited reference is related to elongated, rigid support members having a longitudinal axis extending at an angle to the principle face of the support surface, as set forth by the definition of the class to which it pertains."

Appellant respectfully submits that a definition of the class in which a reference is classified does not guarantee the presence of an analogous reference. While classification of references by the Patent Office is some evidence as to the analogous nature of the reference, "the similarities and differences in the structure and function of the inventions" carry "far greater weight" *In re Ellis*, 476 F.2d 1370, 1372, 177 USPQ 526, 527 (CCAP 1973).

Moreover, Appellant respectfully submits that by stating "...it is also a fact that [Hoven et al.] is related to elongated, rigid support members having a longitudinal axis extending at an angle to the principle face of the support surface," it appears the Examiner has generalized Hoven et al. to facilitate its incorporation within the framework of a rejection under 35 U.S.C. § 103.

Determinations of obviousness require that differences between both the claimed subject matter and the prior art as a whole must be considered. *Bausch & Lomb v. Barnes-Hind/Hydrocurve, Inc.*, 796 F.2d 443, 447-49, 230 USPQ 416, 419-20 (Fed. Cir. 1986).

Moreover, "The claimed invention and reference... are within the same field of endeavor if they have essentially the same function and structure." *In re Deminski*, 796 F.2d 436, 230 USPQ 313 (Fed. Cir. 1986).

Appellant respectfully submits the structure and function Hoven et al. has been generalized to the point that its consideration "as a whole" has been lost. In considering Hoven et al. "as a whole", the "principle face of the support surface" to which the Examiner refers is actually a table top identified at reference numeral 10 of Figure 1 that is connected to

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one end of a supporting leg 12, opposite a foot 13 (see Hoven et al. at column 1, lines 44-50). Accordingly, the table top 10 is supported by the supporting legs 12 while the feet 13 maintain "a line contact with a level floor" (see Hoven et al. at column 2, lines 19-21).

Further, Appellant respectfully submits the footed supporting leg in Hoven et al., after assembled, functions to deter accidental removal or deliberate and surreptitious removal of the foot from the leg and to provide a footed furniture leg which is economical in manufacture, durable in use, and attractive in appearance (see Hoven et al. at column 1, lines 15-29). However, as stated at page 5, lines 20-22 in the specification as filed, the diffusion plate supporting member of the present invention functions to "prevent the diffusion plate from dropping down due to its weight and/or high temperature, and to prevent foreign materials or scratches from occurring due to contact with the diffusion plate during external impact, and to absorb external impact."

Therefore, after considering Hoven et al. "as a whole" and disregarding generalizations made about what Hoven et al. may or may not suggest, Appellant respectfully submits the structure and function of Hoven et al. is not essentially the same as the structure and function of either the related art illustrated in Figure 1 or the presently claimed invention. Moreover, Appellant respectfully submits one of ordinary skill in the art looking to prevent a diffusion plate in an LCD device from dropping due to its own weight and/or temperature and also looking to prevent foreign materials or scratches from occurring due to external impacts while also absorbing external impacts would not turn to the teachings of Hoven et al., teaching a footed supporting leg that deters removal of the foot from the leg, in the hopes of finding a solution.

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According to M.P.E.P. § 2143, establishment of a *prima facie* case of obviousness requires at least some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Moreover, the teaching or suggestion to make the claimed combination must be found in the references, not in the Appellant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). "In determining the propriety of the Patent Office case for obviousness... it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the reference before him to make to the proposed... combination..." *In re Litner*, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972).

In concluding the rejection of 1-11 and 15-28 under 35 U.S.C. § 103(a) as being unpatentable over the related art shown in Figure 1 in view of Hoven et al., the Examiner states it would have been obvious "...to combine the teachings of [the related art shown in Figure 1] and [Hoven et al.] to obtain a support member with the rigidity to support the weight of the structure it is supporting, but also a contacting surface soft enough as to not create scratches or any other kind of surface damage to the surface it is in contact with, as per the teachings of [Hoven et al.]." (see page 6 of the Final Office Action.) Also, at paragraph 7 of the "Response to Arguments" section in the Final Office Action, the Examiner states one of ordinary skill in the art "...would have been drawn to the teachings of Hoven et al. in searching for ways to protect surfaces against rigid support members."

Appellant respectfully submits, however, there is no teaching or suggestion in Hoven et al. or within the level of ordinary skill within the art to teach or reasonably suggest that the contacting surface of Hoven et al. (i.e., the surface of the "contact portion 13" that contacting

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the floor) would "not create scratches or any other kind of surface damage to the surface it is in contact with," as asserted by the Examiner. As Hoven et al. is completely silent as to any teaching or suggestion directed to the protection of surfaces against any type of support member, Appellant respectfully submits one of ordinary skill in the art would not "have been drawn to the teachings of Hoven et al. in searching for ways to protect surfaces against rigid support members," also as asserted by the Examiner. Further, Appellant respectfully submits there is no suggestion or motivation why one of ordinary skill in the art would modify the related art illustrated in Figure 1 with Hoven et al. Absent such a suggestion or motivation to combine the references, Appellant respectfully submits that fragments of isolated, non-analogous disclosures within the related art illustrated in Figure 1 and Hoven et al. have merely been pieced together using the claimed invention as a template via impermissible hindsight reasoning.

At paragraph 7 of the "Response to Arguments" section in the Final Office Action, the Examiner admits that while the claimed invention "pertains to the field of illumination assemblies for backlighting LCD devices, the gist of the instant subject matter revolves about the support member, and is related to the art of LCD devices merely by virtue of its intended use."

Appellant respectfully submits, however, "[d]istilling an invention down to the 'gist' ...of the an invention disregards the requirement of analyzing the subject matter 'as a whole'." *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983). "The invention as a whole embraces the structure, its properties, and the problem it solves." *In re Wright*, 848 F.2d 1216, 6 USPQ2d 1959 (Fed. Cir. 1988). To reiterate, "...the question under 35 U.S.C. § 103 is not whether the differences themselves would have

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been obvious, but whether the claimed invention as a whole would have been obvious."

*Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983).

Accordingly, and in light of the Examiner's statement that "the gist of the instant subject matter revolves about the support member, and is related to the art of LCD devices merely by virtue of its intended use," Appellant respectfully submits neither Hoven et al. nor the presently claimed invention have been considered "as a whole" within the rejection of claims 1-11 and 15-28 under 35 U.S.C. § 103(a) as being unpatentable over the related art shown in Figure 1 in view of Hoven et al.

Appellant respectfully submits that the Examiner has failed to establish a *prima facie* case of obviousness with regards to claims 1-11 and 15-28 and therefore, the rejection should be withdrawn.

B. The Examiner improperly rejected claims 12-14 under 35 U.S.C. § 103(a) as being unpatentable over the related art illustrated in Figure 1 in view of Hoven et al. and further in view of Bidwell et al. (U.S. Pat. No. 134,783), Hayes (U.S. Pat. No. 316,619), Lambert (U.S. Pat. No. 664,652), McGahan (U.S. Pat. No. 667,555), Craig (U.S. Pat. No. 977,710), and/or Crain (U.S. Pat. No. 1, 603,195).

As discussed above, the Examiner has failed to establish a *prima facie* case of obviousness because the combination of the related art illustrated in Figure 1 in view of Hoven et al. does not teach or suggest "a mold frame having first and second end portions; lamp supporters at the first and second end portions of the mold frame; a lamp having first and second end portions, the lamp supporters receiving the lamp...; and a diffusion plate

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supporting member between the reflection sheet and the diffusion plate, wherein only a portion of the diffusion plate supporting member contacting the diffusion plate comprises an elastic material" as recited in claim 1.

Claims 12-14 stand or fall together with claim 1, as they are dependent from independent claim 1. Claims 12-14 are also allowable by virtue of their dependence on claim 1, which is believed to be allowable.

Appellant respectfully submits that the Examiner has failed to establish a *prima facie* case of obviousness with regards to claims 12-14 and therefore, the rejection should be withdrawn.

#### IX. CLAIMS INVOLVED IN THE APPEAL

A copy of the claims involved in the present appeal is attached hereto as Appendix A.

Dated: July 21, 2003

Respectfully submitted,

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### **APPENDIX A**

#### **Claims Involved in the Appeal of Application Serial No. 09/893,622**

1. A back light assembly for a liquid crystal display device having a display area comprising:
  - a mold frame having first and second end portions;
  - lamp supporters at the first and second end portions of the mold frame;
  - a lamp having first and second end portions, the lamp supporters receiving the lamp, the lamp being disposed in a lower portion of the display area;
  - a reflection sheet over the mold frame and below the lamp;
  - a diffusion plate over the lamp; and
  - a diffusion plate supporting member between the reflection sheet and the diffusion plate, wherein only a portion of the diffusion plate supporting member contacting the diffusion plate comprises an elastic material.
2. The back light assembly for a liquid crystal display device of claim 1, wherein the diffusion plate supporting member includes:
  - a support portion coupled to the mold frame at one side, the diffusion plate support member having sufficient rigidity to prevent the diffusion plate from dropping down; and
  - a contact portion having elasticity, coupled to one end of the support portion contacting the diffusion plate.
3. The back light assembly for a liquid crystal display device of claim 2, wherein the contact portion of the diffusion plate supporting member is made of a soft material.

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4. The back light assembly for a liquid crystal display device of claim 2, wherein the contact portion is made of rubber.

5. The back light assembly for a liquid crystal display device of claim 2, wherein the support portion is made of plastic.

6. The back light assembly for a liquid crystal display device of claim 2, wherein the support portion is made of metal.

7. The back light assembly for a liquid crystal display device of claim 2, wherein the diffusion plate supporting member has a conical shape.

8. The back light assembly for a liquid crystal display device of claim 7, wherein the contact portion includes a cap having an insertion hole for receiving one end of the support portion.

9. The back light assembly for a liquid crystal display device of claim 8, wherein the contact portion further includes a projection to prevent the contact portion from detaching from the support portion once the support portion is inserted into the contact portion through the insertion hole.

10. The back light assembly for a liquid crystal display device of claim 8, wherein the contact portion further includes means for preventing the contact portion from detaching from the support portion once the support portion is inserted into the contact portion through the insertion hole.



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11. The back light assembly for a liquid crystal display device of claim 2, wherein the support portion includes a base portion extending outward from a bottom end of the support portion.

12. The back light assembly for a liquid crystal display device of claim 2, wherein the support portion includes a first hole and the mold frame includes a second hole corresponding to the first hole.

13. The back light assembly for a liquid crystal display device of claim 12, wherein a fastening element is passed through the first and second holes of the support portion and the mold frame, respectively, for coupling the diffusion plate supporting member to the mold frame.

14. The back light assembly for a liquid crystal display device of claim 13, wherein the fastening element includes a screw.

15. The back light assembly for a liquid crystal display device of claim 2, further comprising means for coupling the diffusion plate supporting member and the mold frame.

16. The back light assembly for a liquid crystal display device of claim 2, further comprising means for immovably coupling the diffusion plate supporting member and the mold frame.

17. The back light assembly for a liquid crystal display device of claim 1, wherein the diffusion plate supporting member has a conical shape including a top portion and a bottom portion, the top portion having a smaller circumference than the bottom portion.

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18. The back light assembly for a liquid crystal display device of claim 2, wherein the support portion includes a top portion and a bottom portion, the top portion having a smaller circumference than the bottom portion.

19. The back light assembly for a liquid crystal display device of claim 18, wherein the top portion of the support portion has a first conical shape and the bottom portion of the support portion has a second conical shape, the second conical shape being larger than the first conical shape.

20. The back light assembly for a liquid crystal display device of claim 19, wherein the support portion has a middle portion between the top portion and the bottom portion.

21. The back light assembly for a liquid crystal display device of claim 20, wherein the middle portion has a cylindrical shape.

22. The back light assembly for a liquid crystal display device of claim 20, wherein the middle portion is used to couple the contact portion to the support portion.

23. The back light assembly for a liquid crystal display device of claim 2, wherein the support portion includes means for enhancing cohesion between the mold frame and the reflection sheet.

24. The back light assembly for a liquid crystal display device of claim 1, further comprising a plurality of diffusion plate supporting members supporting the diffusion plate.

25. The back light assembly for a liquid crystal display device of claim 1, wherein the lamp supporters include lamp receiving grooves.

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26. The back light assembly for a liquid crystal display device of claim 1, further comprising a panel guide, the diffusion plate being positioned between the panel guide and the mold frame.

27. A method of forming a back light assembly having a mold frame, lamp supporters, a lamp, a reflection sheet, a diffusion plate and a supporting member, the method comprising:

coupling lamp supporters to the mold frame;

receiving the lamp at the lamp supporters, the lamp being disposed in a lower portion of the display area;

positioning the reflection sheet over the mold frame and below the lamp;

positioning the diffusion plate over the lamp; and

positioning the supporting member between the reflection sheet and the diffusion plate, the supporting member having an elastic material contacting the diffusion plate.

28. A back light assembly comprising:

a mold frame;

lamp supporters coupled to the mold frame;

a lamp coupled to the lamp supporters;

a reflection sheet over the mold frame and below the lamp;

a diffusion plate over the lamp; and

a diffusion plate supporting member between the reflection sheet and the diffusion plate, the diffusion plate supporting member having an elastic material contacting the diffusion plate, the diffusion plate supporting member including:

a first portion coupled to the mold frame at one side, the diffusion plate support

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member having sufficient rigidity to prevent the diffusion plate from dropping down; and  
a second portion coupled to one end of the first portion contacting the diffusion plate,  
the second portion having more elasticity than the first portion.